What is claimed is:

- 1. A tire-side-mounted electronic device comprising at least two types of power sources having different discharging characteristics from each other, and an electric load connected to the power sources.
- 2. A tire-side-mounted electronic device according to claim 1, comprising a switching circuit, the at least two types of power sources being connected to the electric load via the switching circuit.
- 3. A tire-side-mounted electronic device according to claim 2, wherein the switching circuit includes a switching element comprising a metal-oxide semiconductor filed-effect transistor, and the electric load includes a temperature sensor for detecting tire temperature and a processor unit for driving the switching element according to a detected signal from the temperature sensor to switch the switching circuit.
- 4. A tire-side-mounted electronic device according to claim 2 or 3, wherein the at least two types of power sources comprise batteries having different discharging characteristics.
- 5. A tire-side-mounted electronic device according to claim 4, wherein the batteries include batteries having different temperature-dependent discharging characteristics.
- 6. A tire-side-mounted electronic device according to claim 5, wherein the batteries are chemical batteries.
- 7. A tire-side-mounted electronic device according to claim 6, wherein the chemical batteries include a manganese dioxide cell and a graphite fluoride cell.
- 8. A tire-side-mounted electronic device according to any one of claims 1 to 3,

wherein the at least two types of power sources comprise a primary battery and a secondary battery connected to charging means.

- 9. A tire-side-mounted electronic device according to claim 8, wherein the primary battery is a chemical battery.
- 10. A tire-side-mounted electronic device according to any one of claims 1 to
- 3, wherein the at least two types of power sources comprise a chemical battery and an electric power generator.
- 11. A tire-side-mounted electronic device according to any one of claims 1 to 10, wherein the tire-side-mounted electronic device is a tire air pressure detection device, and the electric load includes a pressure sensor for detecting tire pressure and a transmitting unit for transmitting a signal detected by the pressure sensor.